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### NOTICE OF ALLOWANCE AND FEE(S) DUE

22852

7590

03/09/2010

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413

EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 03/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,251	02/27/2007	Federico Mancosu	04772.0035	2476

TITLE OF INVENTION: METHOD AND SYSTEM FOR DETERMINING THE ROUGHNESS OF A TYRE ROLLING SURFACE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/09/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fe	ee(s) Transmittal. This apers. Each additional 1	certificate cannot be used	or domestic mailings of the for any other accompanying ent or formal drawing, must	
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FINNEGAN, I LLP 901 NEW YOR	HENDERSON, FA K AVENUE, NW	ARABOW, GARR	ETT & DUNNER Si ac tr	Ethereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.  (Depositor's name)			
WASHINGTON	N, DC 20001-4413		Γ				
			Г			(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE	:	FIRST NAMED INVENTO	DR A	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/09/2010	
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	MICHAEL P	2863	702-151000				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a							
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Un recordation as set for (A) NAME OF ASSI	lless an assignee is iden th in 37 CFR 3.11. Com GNEE	pletion of this form is NO	data will appear on the T a substitute for filing a (B) RESIDENCE: (CT	patent. If an assignee in assignment. TY and STATE OR CC	UNTRY)	document has been filed for	
Please check the appropr	riate assignee category o	r categories (will not be p	rinted on the patent):	┛ Individual   Corp	poration or other private gr	oup entity Government	
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	ns SMALL ENTITY stat	us. See 37 CFR 1.27.			ENTITY status. See 37 C		
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Authorized Signature			Date				
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



# United States Patent and Trademark Office

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FINNEGAN, HE	NDERSON, FARAI	NGHIEM, MICHAEL P			
LLP		ART UNIT	PAPER NUMBER		
901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			2863		

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 493 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 493 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)			
	10/577,251	MANCOSU ET AL.			
Notice of Allowability	Examiner	Art Unit			
	MICHAEL P. NGHIEM	2863			
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	plication. If not included will be mailed in due course. <b>THIS</b>			
1. This communication is responsive to <u>Amendment filed on (</u>	<u>02 December 2009</u> .				
2. X The allowed claim(s) is/are <u>52,54-71,73-97 and 99-104</u> .					
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> </ul>					
2. ☐ Certified copies of the priority documents have					
3. ☐ Copies of the certified copies of the priority does	• • • • • • • • • • • • • • • • • • • •				
International Bureau (PCT Rule 17.2(a)).	samente have been received in the	mational stage application from the			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.					
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.					
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached					
1)  hereto or 2)  to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5.	latent Application			
<ol> <li>Induce of References Cited (PTO-692)</li> <li>Induce of References Cited (PTO-</li></ol>	6. ☐ Interview Summary	. ,			
	Paper No./Mail Dat	e			
3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>11-25-09</u>	7. 🛛 Examiner's Amendr	nenvComment			
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	<del>_</del>	ent of Reasons for Allowance			
	9.				

## Drawings

Page 2

The drawings were received on December 2, 2009. These drawings are acceptable.

#### Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In Claim 71:

Last line, after "by", replace "the rolling tyre" with – the tyre during rolling --.

#### Reasons For Allowance

The following is an examiner's statement of reasons for allowance:

The **combination** as claimed wherein a method and system for determining the roughness of a rolling surface of a tyre comprising frequency filtering of the first signal for extracting a second signal representative of motion components of said at least one point due to the deformations undergone by the tyre during the rolling (claims 52, 71, 97) is not disclosed, suggested, or made obvious by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Hamberger et al. (DE 195 37 257, see English translation) discloses a method for detecting a physical profile of a roadway surface (Abstract). Hamberger et al. discloses the detected rotation speed of the wheel is subjected to high-pass filtering to achieve greater signal strength of the variations in the rotation speed of the wheel <u>due to occurring unevenness of the roadway</u> and to <u>eliminate the part signals which cause changes in speed via external intervention</u> (column 2, lines 15-20). However, Hamberger et al. does not disclose filtering of the detected rotation speed signal for extracting a second signal representative of motion components of said at least one point <u>due to the deformations undergone by the tyre during the rolling.</u>

Masaki et al. (US 4,651,290) discloses a road condition discriminating system (Abstract). However, Masaki et al. does not disclose filtering of a signal for extracting a second signal representative of motion components of said at least one point <u>due to the deformations undergone by the tyre</u> during the rolling.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

March 2, 2010